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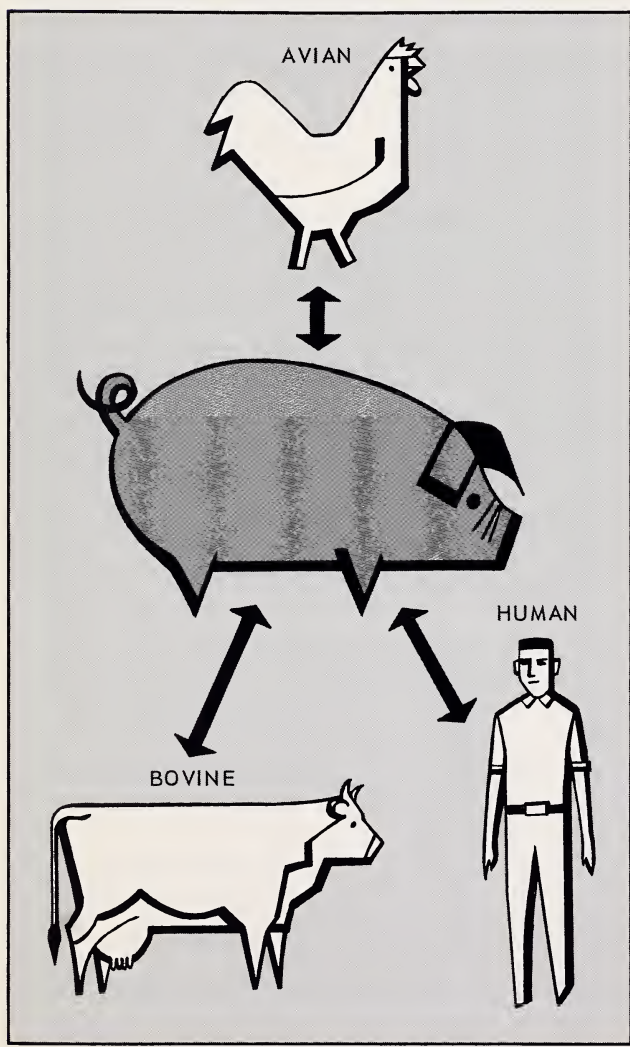
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# AVIAN TUBERCULOSIS IN **HOGS**

A COSTLY LIVESTOCK DISEASE



Most tuberculous hogs appear healthy. You cannot look at them and tell whether or not they are infected. This is true even when the disease is far advanced and affects all organs of the body.

Since tuberculosis accounts for nearly one-fifth of all condemned hog carcasses, it is especially important for you to know about the disease. What animals spread it? How is it detected? How can you help get rid of it? Let's examine these questions one at a time. The answers could help you avoid future dollar losses.

## **WHAT ANIMALS SPREAD TUBERCULOSIS?**

Various types of tubercle bacilli exist, and they most commonly infect a single species of animal. These bacilli are capable, however, of causing disease in a wide range of hosts—including man and his domestic animals. But you are concerned primarily with three types: human, bovine, and avian.

The human type tubercle bacilli are usually associated with the familiar lung disease in man. They can also cause disease in other parts of the body and in other animals, including cattle, hogs, dogs, cats, canaries, and monkeys.

The bovine bacilli are usually associated with tuberculosis in cattle. Many other species including man may also become afflicted—if they come in contact with infected cattle or drink unpasteurized milk from infected cattle.

The avian bacilli infect chickens primarily, but they may cause the disease in varying degrees in a wide variety of birds and mammals.

Hogs are susceptible to infection by all three types of tubercle bacilli. Odds are against hogs becoming infected with human or bovine types in the United States, however. This is due primarily to an extensive campaign to eradicate bovine tuber-

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culosis. The prevalence of this disease has been reduced to less than 0.1 percent among U.S. cattle. Laws requiring the cooking of all garbage before it can be fed to hogs has also played a part.

Avian tuberculosis, on the other hand, is still a major cause of condemnation of pork at slaughter houses. Federal meat inspectors reported in 1965 over a million and a third cases of tuberculosis found in carcasses at packing houses.



TOP—Tuberculosis lesion in head gland of hog. BOTTOM—Tuberculosis lesion in intestinal gland of hog.

Tuberculosis accounts for nearly one fifth of all hog carcasses that are condemned or retained by meat inspectors. Early U. S. studies showed that about 80 percent of tuberculosis cases in hogs are caused by avian-type tubercle bacilli. More recent studies, conducted at the National Animal Disease Laboratory, places this figure close to 90 percent.

## HOW IS THE DISEASE DETECTED?

Two methods are available for detecting tuberculosis in hogs. One is known as down-the-road testing. Veterinarians visit farms and inject a small amount of tuberculin into the skin of suspected animals. The tuberculin, a straw to amber colored liquid, contains no bacteria—either living or dead. The test is read by a veterinarian 48 hours after inoculation. A swelling of the skin at the site of the injection indicates that the animal is infected.

The second, and more economical way, is to inspect the glands and organs of hogs at the time of slaughter. This method is emphasized in eradication work, because it is much less costly than down-the-road testing. It also places less of a burden on the many farmers whose herds are free of tuberculosis.

Here's how the market inspection works. State or Federal inspectors examine hogs for lesions at the time of slaughter. If lesions are found, they report the finding to the State-Federal animal health authorities and an effort is made to locate the herd of origin. Once the herd is located, the farm is visited by a veterinarian employed by either the State or Federal government. He then advises the owner on steps to be taken to eradicate the disease from his herd.

Other methods are also used—besides the inspection of hogs at slaughter—to locate herds infected with tuberculosis. Tuberculosis may be found, for example, in poultry or cattle through examina-





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tion at slaughter or through farm testing. And if hogs had run loose with these infected animals, chances are they also have the disease.

It is not always easy, however, to trace hogs or other market animals back to their herds of origin. State and Federal officials, therefore, are working closely with the livestock marketing industry to promote effective and low-cost animal identification and tracing procedures. Once employed on a wide-scale basis, much earlier detection of infected herds will be possible.

As a result of early detection, losses can be greatly reduced. Herds are tested and infected animals removed before the disease has a chance to spread. This is coupled with the cleaning and disinfection of equipment and facilities and the removal of other infected livestock, particularly poultry, from association with hogs.


Late detection is costly. It usually means that the disease has spread throughout the herd, and complete elimination of the hogs and other infected livestock becomes mandatory. This must also be followed by thorough cleaning and disinfection before a farm can be restocked.

## WHAT CAN YOU DO TO HELP?

You are the key to effective eradication of avian tuberculosis from hogs. By following these three husbandry practices, you can greatly reduce the incidence of the disease:

1. Don't allow domestic poultry of any kind to run loose and come in contact with hogs.
2. Don't feed dead poultry to hogs. Incinerate or bury dead birds at least 18 inches deep. Before burying, soak the birds with cresylic disinfectant to discourage foxes and dogs from digging them up.
3. Do not spread poultry litter on fields that are to be used as pastures for hogs or other animals.





If you feed poultry or hatchery offal or other garbage, it must be cooked. Be sure that your cooking equipment is operating properly—that it thoroughly sterilizes the offal before it is fed. And equipment used to handle raw offal should not be used to handle the offal once it has been cooked.

Should your hogs ever become infected with tuberculosis, you can help further by cooperating with the State or Federal veterinarian who visits your farm. He is well qualified to advise about the disease and methods of eradicating it.

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